Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Why > How > What:**  Now that you have learned the Geometry Fundamentals, look over these three example student short answer responses.

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| **Word Problem:** Use complete sentences to complete the following. |
| 1. A worker placed white tiles around black tiles in the pattern shown in the three figures below:      1. Based on this pattern, how many white tiles would be needed for 4 black tiles?   **Student 1:**  The pattern is to add two white tiles for every one black tile. There are 14 white tiles for 4 black tiles.  **Student 2:**  Since the constant rate of change is going by two that means that for one tile you need eight white tiles, for two you need ten white tiles, and for three you need twelve so that means for four you will need fourteen.  **Student 3:**  The equation of this is y = 2x + 6. So y = 2(4) + 6 simplifies into y = 14 white tiles  **Student 4:**  In order for to have four black tiles, you would need fourteen white tiles.  **Student 5:**  If there were four black tiles you would need 14 white tiles. This is because, in order to surround those black tiles you need four on each side of the black tiles and then you need to cover the top and bottom of the tiles with three white tiles each. This way you surround all sides of the black tiles. |

Answer the following questions using complete sentences.

1. Which of these students has a good why explanation? Explain your response.
2. Which of these students has a good how explanation? Explain your response.
3. Which of these students has a good what explanation? Explain your response.